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=> s nucleoside? and 5 (2a) termin?
L1 6775 NUCLEOSIDE? AND 5 (2A) TERMIN?

=> s l1 and lipophilic

1809 L1 AND LIPOPHILIC

=> s 12 and 2 (2a) methoxy

L3 799 L2 AND 2 (2A) METHOXY

=> s 13 and plurality

L4 259 L3 AND PLURALITY

=> s 14 and modif? (3a) oligonucleotide?

L5 247 L4 AND MODIF? (3A) OLIGONUCLEOTIDE?

=> s 15 and 5 (4a) lipophilic

L6 5 L5 AND 5 (4A) LIPOPHILIC

=> dup rem 16

AN

PROCESSING COMPLETED FOR L6

L7 5 DUP REM L6 (0 DUPLICATES REMOVED)

=> d 17 bib abs 1-5

L7 ANSWER 1 OF 5 USPATFULL on STN

2005:50420 USPATFULL

TI Derivatized oligonucleotides having improved uptake and other properties

IN Manoharan, Muthiah, Carlsbad, CA, UNITED STATES Cook, Phillip Dan, Carlsbad, CA, UNITED STATES

Bennett, Clarence Frank, Carlsbad, CA, UNITED STATES

PA Isis Pharmaceuticals, Inc. (U.S. corporation)

PI US 2005043219 A1 20050224

AI US 2004-755166 A1 20040109 (10)

RLI Continuation of Ser. No. US 2002-73718, filed on 11 Feb 2002, GRANTED, Pat. No. US 6831166 Division of Ser. No. US 2000-633659, filed on 7 Aug

2000, GRANTED, Pat. No. US 6395492 Division of Ser. No. US 1994-211882, filed on 22 Apr 1994, GRANTED, Pat. No. US 6153737 Continuation-in-part of Ser. No. WO 1992-US9196, filed on 23 Oct 1992, PENDING

DT Utility FS APPLICATION

LREP WOODCOCK WASHBURN LLP, ONE LIBERTY PLACE - 46TH FLOOR, PHILADELPHIA, PA,

19103

CLMN Number of Claims: 7

ECL Exemplary Claim: CLM-01-44

DRWN No Drawings

LN.CNT 2116

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Linked nucleosides having at least one functionalized nucleoside that bears a substituent such as a steroid molecule, a reporter molecule, a non-aromatic lipophilic molecule, a reporter enzyme, a peptide, a protein, a water soluble vitamin, a lipid soluble vitamin, an RNA cleaving complex, a metal chelator, a porphyrin, an alkylator, a pyrene, a hybrid photonuclease/intercalator, or an aryl azide photo-crosslinking agent exhibit increased cellular uptake and other properties. The substituent can be attached at the 2'-position of the functionalized nucleoside via a linking group. If at least a portion of the remaining liked nucleosides are 2'-deoxy-2'-fluoro, 2'-O-methoxy, 2 '-O-ethoxy, 2'-O-propoxy, 2'-O-aminoalkoxy or 2'-O-allyloxy nucleosides, the substituent can be attached via a linking group at any of the 3' or the 5' positions of the nucleoside or on the heterocyclic base of the nucleoside or on the inter-nucleotide linkage linking the nucleoside to an adjacent nucleoside.

## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 2 OF 5 USPATFULL on STN

AN 2005:49481 USPATFULL

TI Platelet derived growth factor (PDGF) nucleic acid ligand complexes

IN Janjic, Nebojsa, Boulder, CO, UNITED STATES Gold, Larry, Boulder, CO, UNITED STATES

PA Gilead Sciences, Inc, Foster City, CA, UNITED STATES, 94404 (U.S.

corporation)

US 2005042273 A1 20050224

AI US 2003-606159 A1 20030624 (10)

RLI Division of Ser. No. US 2001-851486, filed on 8 May 2001, GRANTED, Pat. No. US 6582918 Division of Ser. No. US 1997-991743, filed on 16 Dec 1997, GRANTED, Pat. No. US 6229002 Continuation-in-part of Ser. No. US 1996-618693, filed on 20 Mar 1996, GRANTED, Pat. No. US 5723594 Continuation-in-part of Ser. No. US 1995-479783, filed on 7 Jun 1995, GRANTED, Pat. No. US 5668264 Continuation-in-part of Ser. No. US 1995-479725, filed on 7 Jun 1995, GRANTED, Pat. No. US 5674685

DT Utility

PΙ

FS APPLICATION

LREP SWANSON & BRATSCHUN L.L.C., 1745 SHEA CENTER DRIVE, SUITE 330, HIGHLANDS RANCH, CO, 80129

CLMN Number of Claims: 8 ECL Exemplary Claim: 1 DRWN 26 Drawing Page(s)

LN.CNT 4240

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention discloses a method for preparing a complex comprised of a PDGF Nucleic Acid Ligand and a Non-Immunogenic, High Molecular Weight Compound or Lipophilic Compound by identifying a PDGF Nucleic Acid Ligand by SELEX methodology and associating the PDGF Nucleic Acid Ligand with a Non-Immunogenic, High Molecular Weight Compound or Lipophilic Compound. The invention further discloses Complexes comprising one or more PDGF Nucleic Acid Ligands in association with a Non-Immunogenic, High Molecular Weight Compound or Lipophilic Compound. The invention further includes a Lipid construct comprising a PDGF Nucleic Acid Ligand or Complex and methods for making the same.

```
L7
    ANSWER 3 OF 5 USPATFULL on STN
       2005:16419 USPATFULL
ΑN
      Methods and compositions for the treatment of MHC-associated conditions
ТT
      Holoshitz, Joseph, Ann Arbor, MI, UNITED STATES
IN
       Ling, Song, Ypsilanti, MI, UNITED STATES
PA
       The Regents of the University of Michigan, Ann Arbor, MI (U.S.
       corporation)
PΊ
       US 2005013820
                          A1
                               20050120
ΑI
      US 2004-845407
                         A1
                               20040513 (10)
       Continuation-in-part of Ser. No. US 2002-161959, filed on 3 Jun 2002,
RLI
       PENDING
DT
      Utility
      APPLICATION
FS
LREP
      MEDLEN & CARROLL, LLP, Suite 350, 101 Howard Street, San Francisco, CA,
CLMN
      Number of Claims: 18
ECL
       Exemplary Claim: 1
       25 Drawing Page(s)
DRWN
LN.CNT 5430
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       The present invention relates to methods and compositions for
       counteracting and reversing disease-causing signaling defects in
       disorders with underlying signal transduction aberrations, including but
       not limited to rheumatoid arthritis.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
    ANSWER 4 OF 5 USPATFULL on STN
L7
ΑN
       2003:51684 USPATFULL
TI
       Platelet derived growth factor (PDGF) nucleic acid ligand complexes
IN
       Janjic, Nebojsa, Boulder, CO, UNITED STATES
      Gold, Larry, Boulder, CO, UNITED STATES
PΙ
      US 2003036642
                         A1
                               20030220
      US 6582918
                          B2
                               20030624
      US 2001-851486
                         A1
                               20010508 (9)
AΙ
      Division of Ser. No. US 1997-991743, filed on 16 Dec 1997, PATENTED
RLI
       Continuation-in-part of Ser. No. US 1996-618693, filed on 20 Mar 1996,
       PATENTED Continuation-in-part of Ser. No. US 1995-481710, filed on 7 Jun
       1995, PATENTED Continuation-in-part of Ser. No. US 1995-479725, filed on
       7 Jun 1995, PATENTED
DT
      Utility
FS
      APPLICATION
LREP
      Swanson & Bratschun, L.L.C., Suite 330, 1745 Shea Center Drive,
      Highlands Ranch, CO, 80129
CLMN
      Number of Claims: 57
ECL
      Exemplary Claim: 1
DRWN
      26 Drawing Page(s)
LN.CNT 4335
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
      This invention discloses a method for preparing a complex comprised of a
      PDGF Nucleic Acid Ligand and a Non-Immunogenic, High Molecular Weight
      Compound or Lipophilic Compound by identifying a PDGF Nucleic
      Acid Ligand by SELEX methodology and associating the PDGF Nucleic Acid
      Ligand with a Non-Immunogenic, High Molecular Weight Compound or
      Lipophilic Compound. The invention further discloses Complexes
      comprising one or more PDGF Nucleic Acid Ligands in association with a
      Non-Immunogenic, High Molecular Weight Compound or Lipophilic
      Compound. The invention further includes a Lipid construct comprising a
      PDGF Nucleic Acid Ligand or Complex and methods for making the same.
```

### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

- L7 ANSWER 5 OF 5 USPATFULL on STN
- AN 2001:67813 USPATFULL
- TΙ Platelet derived growth factor (PDGF) nucleic acid liqund complexes
- IN Janjic, Nebojsa, Boulder, CO, United States

Gold, Larry, Boulder, CO, United States

PA Nexstar Pharmaceuticlas, Inc., Boulder, CO, United States (U.S.

corporation)

PI US 6229002 B1 20010508 AI US 1997-991743 19971216 (8)

RLI Continuation-in-part of Ser. No. US 1996-618693, filed on 20 Mar 1996, now patented, Pat. No. US 5723594 Continuation-in-part of Ser. No. US 1995-479783, filed on 7 Jun 1995, now patented, Pat. No. US 5668264 Continuation-in-part of Ser. No. US 1995-479725, filed on 7 Jun 1995, now patented, Pat. No. US 5674685

DT Utility FS Granted

EXNAM Primary Examiner: Zitomer, Stephanie

LREP Swanson & Bratschun LLC CLMN Number of Claims: 11 ECL Exemplary Claim: 1

DRWN 30 Drawing Figure(s); 26 Drawing Page(s)

LN.CNT 3002

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention discloses a method for preparing a complex comprised of a PDGF Nucleic Acid Ligand and a Non-Immunogenic, High Molecular Weight Compound or Lipophilic Compound by identifying a PDGF Nucleic Acid Ligand by SELEX methodology and associating the PDGF Nucleic Acid Ligand with a Non-Immunogenic, High Molecular Weight Compound or Lipophilic Compound. The invention further discloses Complexes comprising one or more PDGF Nucleic Acid Ligands in association with a Non-Immunogenic, High Molecular Weight Compound or Lipophilic Compound. The invention further includes a Lipid construct comprising a PDGF Nucleic Acid Ligand or Complex and methods for making the same.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
L15 ANSWER 1 OF 9 USPATFULL on STN
       2004:247178 USPATFULL
AN
       Oligoribonucleotides and ribonucleases for cleaving RNA
TI
       Crooke, Stanley T., Carlsbad, CA, UNITED STATES
ΙN
PΙ
      US 2004191773
                          A1
                               20040930
      US 2003-371526
                         A1
                               20030221 (10)
ΑI
      Continuation of Ser. No. US 2002-78949, filed on 20 Feb 2002, PENDING
RLI
      Continuation of Ser. No. US 2000-479783, filed on 7 Jan 2000, PENDING
       Division of Ser. No. US 1997-870608, filed on 6 Jun 1997, GRANTED, Pat.
      No. US 6107094 Continuation-in-part of Ser. No. US 1996-659440, filed on
       6 Jun 1996, GRANTED, Pat. No. US 5898031
DT
      Utility
FS
      APPLICATION
LREP
      COZEN O'CONNOR, P.C., 1900 MARKET STREET, PHILADELPHIA, PA, 19103-3508
      Number of Claims: 93
CLMN
ECL
       Exemplary Claim: 1
       10 Drawing Page(s)
DRWN
LN.CNT 3918
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Oligomeric compounds including oligoribonucleotides and
       oligoribonucleosides are provided that have subsequences of
       2'-pentoribofuranosyl nucleosides that activate dsRNase. The
       oligoribonucleotides and oligoribonucleosides can include substituent
      groups for increasing binding affinity to complementary nucleic acid
       strand as well as substituent groups for increasing nuclease resistance.
      The oligomeric compounds are useful for diagnostics and other research
      purposes, for modulating the expression of a protein in organisms, and
       for the diagnosis, detection and treatment of other conditions
       susceptible to oligonucleotide therapeutics. Also included in the
       invention are mammalian ribonucleases, i.e., enzymes that degrade RNA,
       and substrates for such ribonucleases. Such a ribonuclease is referred
       to herein as a dsRNase, wherein "ds" indicates the RNase's specificity
       for certain double-stranded RNA substrates. The artificial substrates
       for the dsRNases described herein are useful in preparing affinity
       matrices for purifying mammalian ribonuclease as well as non-degradative
       RNA-binding proteins.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L15 ANSWER 2 OF 9 USPATFULL on STN
AN
       2003:173929 USPATFULL
TI
       Oligoribonucleotides and ribonucleases for cleaving RNA
IN
       Crooke, Stanley T., Carlsbad, CA, UNITED STATES
PΙ
       US 2003119777
                         A1
                               20030626
       US 2002-281297
                               20021025 (10)
AΙ
                          Α1
      Division of Ser. No. US 2000-479783, filed on 7 Jan 2000, PENDING
RLI
       Division of Ser. No. US 1997-870608, filed on 6 Jun 1997, GRANTED, Pat.
       No. US 6107094 Continuation-in-part of Ser. No. US 1996-659440, filed on
       6 Jun 1996, GRANTED, Pat. No. US 5898031
DT
       Utility
FS
       APPLICATION
       COZEN O'CONNOR, 1900 Market Street, Philadelphia, PA, 19103
LREP
CLMN
       Number of Claims: 93
ECL
       Exemplary Claim: 1
DRWN
       8 Drawing Page(s)
LN.CNT 3925
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
      Oligomeric compounds including oligoribonucleotides and
AB
       oligoribonucleosides are provided that have subsequences of
       2'-pentoribofuranosyl nucleosides that activate dsRNase. The
       oligoribonucleotides and oligoribonucleosides can include substituent
       groups for increasing binding affinity to complementary nucleic acid
       strand as well as substituent groups for increasing nuclease resistance.
       The oligomeric compounds are useful for diagnostics and other research
```

purposes, for modulating the expression of a protein in organisms, and

for the diagnosis, detection and treatment of other conditions susceptible to oligonucleotide therapeutics. Also included in the invention are mammalian ribonucleases, i.e., enzymes that degrade RNA, and substrates for such ribonucleases. Such a ribonuclease is referred to herein as a dsRNase, wherein "ds" indicates the RNase's specificity for certain double-stranded RNA substrates. The artificial substrates for the dsRNases described herein are useful in preparing affinity matrices for purifying mammalian ribonuclease as well as non-degradative RNA-binding proteins.

## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
L15 ANSWER 3 OF 9 USPATFULL on STN
AN
       2003:140942 USPATFULL
TI
       Oligoribonucleotides and ribonucleases for cleaving RNA
       Crooke, Stanley T., Carlsbad, CA, UNITED STATES
ΙN
PΙ
                         A1
                               20030522
       US 2003096784
                               20021025 (10)
ΑI
       US 2002-281349
                         A1
       Division of Ser. No. US 2000-479783, filed on 7 Jan 2000, PENDING
RLI
       Division of Ser. No. US 1997-870608, filed on 6 Jun 1997, GRANTED, Pat.
       No. US 6107094 Continuation-in-part of Ser. No. US 1996-659440, filed on
       6 Jun 1996, GRANTED, Pat. No. US 5898031
DT
       Utility
FS
       APPLICATION
LREP
       COZEN O'CONNOR, 1900 Market Street, Philadelphia, PA, 19103
CLMN
       Number of Claims: 93
ECL
       Exemplary Claim: 1
DRWN
       8 Drawing Page(s)
LN.CNT 3925
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Oligomeric compounds including oligoribonucleotides and
       oligoribonucleosides are provided that have subsequences of
       2'-pentoribofuranosyl nucleosides that activate dsRNase. The
       oligoribonucleotides and oligoribonucleosides can include substituent
       groups for increasing binding affinity to complementary nucleic acid
       strand as well as substituent groups for increasing nuclease resistance.
       The oligomeric compounds are useful for diagnostics and other research
       purposes, for modulating the expression of a protein in organisms, and
       for the diagnosis, detection and treatment of other conditions
       susceptible to oligonucleotide therapeutics. Also included in the
       invention are mammalian ribonucleases, i.e., enzymes that degrade RNA,
       and substrates for such ribonucleases. Such a ribonuclease is referred
       to herein as a dsRNase, wherein "ds" indicates the RNase's specificity
```

#### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

RNA-binding proteins.

```
L15 ANSWER 4 OF 9 USPATFULL on STN
AN
       2003:140446 USPATFULL
ΤI
       Oligoribonucleotides and ribonucleases for cleaving RNA
ΤN
       Crooke, Stanley T., Carlsbad, CA, UNITED STATES
PΙ
      US 2003096287
                         A1
                               20030522
ΑI
      US 2002-281312
                         A1
                               20021025 (10)
      Division of Ser. No. US 2000-479783, filed on 7 Jan 2000, PENDING
RLI
       Division of Ser. No. US 1997-870608, filed on 6 Jun 1997, GRANTED, Pat.
       No. US 6107094 Continuation-in-part of Ser. No. US 1996-659440, filed on
       6 Jun 1996, GRANTED, Pat. No. US 5898031
DT
      Utility
FS
      APPLICATION
LREP
      COZEN O'CONNOR, 1900 Market Street, Philadelphia, PA, 19103
CLMN
      Number of Claims: 93
ECL
       Exemplary Claim: 1
DRWN
       8 Drawing Page(s)
LN.CNT 3909
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
```

for certain double-stranded RNA substrates. The artificial substrates for the dsRNases described herein are useful in preparing affinity

matrices for purifying mammalian ribonuclease as well as non-degradative

Oligomeric compounds including oligoribonucleotides and oligoribonucleosides are provided that have subsequences of 2'-pentoribofuranosyl nucleosides that activate dsRNase. The oligoribonucleotides and oligoribonucleosides can include substituent groups for increasing binding affinity to complementary nucleic acid strand as well as substituent groups for increasing nuclease resistance. The oligomeric compounds are useful for diagnostics and other research purposes, for modulating the expression of a protein in organisms, and for the diagnosis, detection and treatment of other conditions susceptible to oligonucleotide therapeutics. Also included in the invention are mammalian ribonucleases, i.e., enzymes that degrade RNA, and substrates for such ribonucleases. Such a ribonuclease is referred to herein as a dsRNase, wherein "ds" indicates the RNase's specificity for certain double-stranded RNA substrates. The artificial substrates for the dsRNases described herein are useful in preparing affinity matrices for purifying mammalian ribonuclease as well as non-degradative RNA-binding proteins.

# CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
L15 ANSWER 5 OF 9 USPATFULL on STN
       2003:140445 USPATFULL
AN
TI
       Oligoribonucleotides and ribonucleases for cleaving RNA
IN
       Crooke, Stanley T., Carlsbad, CA, UNITED STATES
PΙ
      US 2003096286
                          A1
                               20030522
                               20021025 (10)
ΑI
      US 2002-280600
                         A1
RLI
      Division of Ser. No. US 2000-479783, filed on 7 Jan 2000, PENDING
      Division of Ser. No. US 1997-870608, filed on 6 Jun 1997, GRANTED, Pat.
      No. US 6107094 Continuation-in-part of Ser. No. US 1996-659440, filed on
       6 Jun 1996, GRANTED, Pat. No. US 5898031
DT
      Utility
FS
      APPLICATION
LREP
      COZEN O'CONNOR, 1900 Market Street, Philadelphia, PA, 19103
CLWM
      Number of Claims: 93
ECL
      Exemplary Claim: 1
DRWN
       8 Drawing Page(s)
LN.CNT 3943
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
      Oligomeric compounds including oligoribonucleotides and
AΒ
      oligoribonucleosides are provided that have subsequences of
       2'-pentoribofuranosyl nucleosides that activate dsRNase. The
      oligoribonucleotides and oligoribonucleosides can include substituent
      groups for increasing binding affinity to complementary nucleic acid
      strand as well as substituent groups for increasing nuclease resistance.
      The oligomeric compounds are useful for diagnostics and other research
      purposes, for modulating the expression of a protein in organisms, and
       for the diagnosis, detection and treatment of other conditions
```

susceptible to oligonucleotide therapeutics. Also included in the invention are mammalian ribonucleases, i.e., enzymes that degrade RNA, and substrates for such ribonucleases. Such a ribonuclease is referred to herein as a dsRNase, wherein "ds" indicates the RNase's specificity for certain double-stranded RNA substrates. The artificial substrates for the dsRNases described herein are useful in preparing affinity

matrices for purifying mammalian ribonuclease as well as non-degradative

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

RNA-binding proteins.

```
L15
   ANSWER 6 OF 9 USPATFULL on STN
      2002:314673 USPATFULL
AN
TI
      Derivatized oligonucleotides having improved uptake and other properties
IN
      Manoharan, Muthiah, Carlsbad, CA, UNITED STATES
      Cook, Phillip Dan, Carlsbad, CA, UNITED STATES
      Bennett, Clarence Frank, Carlsbad, CA, UNITED STATES
PA
      ISIS Pharmaceutical, Inc. (U.S. corporation)
PΤ
      US 2002177150 A1 20021128
                        B2
      US 6831166
                              20041214
ΑI
      US 2002-73718
                       A1 20020211 (10)
```

RLI Division of Ser. No. US 2000-633659, filed on 7 Aug 2000, GRANTED, Pat. No. US 6395492 Division of Ser. No. US 1998-211882, filed on 15 Dec 1998, GRANTED, Pat. No. US 6373826 Continuation-in-part of Ser. No. WO 1992-US9196, filed on 23 Oct 1992, UNKNOWN

DT Utility FS APPLICATION

LREP Woodcock Washburn LLP, 46th Floor, One Liberty Place, Philadelphia, PA,

CLMN Number of Claims: 44 ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 2268

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Linked nucleosides having at least one functionalized nucleoside that bears a substituent such as a steroid molecule, a reporter molecule, a non-aromatic lipophilic molecule, a reporter enzyme, a peptide, a protein, a water soluble vitamin, a lipid soluble vitamin, an RNA cleaving complex, a metal chelator, a porphyrin, an alkylator, a pyrene, a hybrid photonuclease/intercalator, or an aryl azide photo-crosslinking agent exhibit increased cellular uptake and other properties. The substituent can be attached at the 2'-position of the functionalized nucleoside via a linking group. If at least a portion of the remaining liked nucleosides are 2'-deoxy-2'-fluoro, 2'-O-methoxy, 2'-O-ethoxy, 2'-O-propoxy, 2'-O-aminoalkoxy or 2'-O-allyloxy nucleosides, the substituent can be attached via a linking group at any of the 3' or the 5' positions of the nucleoside or on the heterocyclic base of the nucleoside or on the inter-nucleotide linkage linking the nucleoside to an adjacent nucleoside.

### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 7 OF 9 USPATFULL on STN

AN 2002:295143 USPATFULL

Oligoribonucleotides and ribonucleases for cleaving RNA

IN Crooke, Stanley T., Carlsbad, CA, UNITED STATES

PI US 2002165189 A1 20021107

AI US 2002-78949 A1 20020220 (10)

Continuation of Ser. No. US 2000-479783, filed on 7 Jan 2000, PENDING

DT Utility

TI

RLI

FS APPLICATION

LREP Woodcock Washburn LLP, One Liberty Place, 46th Floor, Philadelphia, PA,

CLMN Number of Claims: 93 ECL Exemplary Claim: 1 DRWN 10 Drawing Page(s)

LN.CNT 3922

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Oligomeric compounds including oligoribonucleotides and oligoribonucleosides are provided that have subsequences of 2'-pentoribofuranosyl nucleosides that activate dsRNase. The oligoribonucleotides and oligoribonucleosides can include substituent groups for increasing binding affinity to complementary nucleic acid strand as well as substituent groups for increasing nuclease resistance. The oligomeric compounds are useful for diagnostics and other research purposes, for modulating the expression of a protein in organisms, and for the diagnosis, detection and treatment of other conditions susceptible to oligonucleotide therapeutics. Also included in the invention are mammalian ribonucleases, i.e., enzymes that degrade RNA, and substrates for such ribonucleases. Such a ribonuclease is referred to herein as a dsRNase, wherein "ds" indicates the RNase's specificity for certain double-stranded RNA substrates. The artificial substrates for the dsRNases described herein are useful in preparing affinity matrices for purifying mammalian ribonuclease as well as non-degradative RNA-binding proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
ΤI
       Oligoribonucleotides and ribonucleases for cleaving RNA
       Crooke, Stanley T., Carlsbad, CA, United States
       Isis Pharmaceuticals, Inc., Carlsbad, CA, United States (U.S.
PA
       corporation) .
PΙ
       US 6107094
                               20000822
       US 1997-870608
                               19970606 (8)
ΑI
       Continuation-in-part of Ser. No. US 1996-659440, filed on 6 Jun 1996,
RLI
       now patented, Pat. No. US 5898031
DT
       Utility
       Granted
FS
       Primary Examiner: Elliott, George C.; Assistant Examiner: McGarry, Sean
EXNAM
       Woodcock Washburn Kurtz Mackiewicz & Norris LLP
LREP
CLMN
       Number of Claims: 8
       Exemplary Claim: 1
ECL
       15 Drawing Figure(s); 10 Drawing Page(s)
DRWN
LN.CNT 3806
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Oligomeric compounds including oligoribonucleotides and
       oligoribonucleosides are provided that have subsequences of
       2'-pentoribofuranosyl nucleosides that activate dsRNase. The
       oligoribonucleotides and oligoribonucleosides can include substituent
       groups for increasing binding affinity to complementary nucleic acid
       strand as well as substituent groups for increasing nuclease resistance.
       The oligomeric compounds are useful for diagnostics and other research
       purposes, for modulating the expression of a protein in organisms, and
       for the diagnosis, detection and treatment of other conditions
       susceptible to oligonucleotide therapeutics. Also included in the
       invention are mammalian ribonucleases, i.e., enzymes that degrade RNA,
       and substrates for such ribonucleases. Such a ribonuclease is referred
       to herein as a dsRNase, wherein "ds" indicates the RNase's specificity
       for certain double-stranded RNA substrates. The artificial substrates
       for the dsRNases described herein are useful in preparing affinity
       matrices for purifying mammalian ribonuclease as well as non-degradative
       RNA-binding proteins.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L15 ANSWER 9 OF 9 USPATFULL on STN
       1999:50839 USPATFULL
AN
TI
       Oligoribonucleotides for cleaving RNA
       Crooke, Stanley T., Carlsbad, CA, United States
IN
       ISIS Pharmaceuticals, Inc., Carlsbad, CA, United States (U.S.
PA
       corporation)
PΙ
       US 5898031
                               19990427
ΑI
       US 1996-659440
                               19960606 (8)
DT
       Utility
FS
       Granted
EXNAM Primary Examiner: LeGuyader, John L.
LREP
       Woodcock Washburn Kurtz Mackiewicz & Norris LLP
CLMN
       Number of Claims: 66
ECL
       Exemplary Claim: 1
DRWN
       12 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 3150
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AΒ
       Oligomeric compounds including oligoribonucleotides and
       oligoribonucleosides are provided that have subsequences of
       2-pentoribofuranosyl nucleosides that activate dsRNase. The
       oligoribonucleotides and oligoribonucleosides can include substituent
       groups for increasing binding affinity to complementary nucleic acid
       strand as well as substituent groups for increasing nuclease resistance.
       The oligomeric compounds are useful for diagnostics and other research
       purposes, for modulating the expression of a protein in organisms, and
       for the diagnosis, detection and treatment of other conditions
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susceptible to oligonucleotide therapeutics.

AN

2000:109600 USPATFULL

(FILE 'HOME' ENTERED AT 12:35:13 ON 24 MAY 2005)

9 S L14 NOT L7

FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 12:35:44 ON 24 MAY 2005 6775 S NUCLEOSIDE? AND 5 (2A) TERMIN? L1L2 1809 S L1 AND LIPOPHILIC L3 799 S L2 AND 2 (2A) METHOXY 259 S L3 AND PLURALITY L4247 S L4 AND MODIF? (3A) OLIGONUCLEOTIDE? L5L6 5 S L5 AND 5 (4A) LIPOPHILIC 5 DUP REM L6 (0 DUPLICATES REMOVED) L7 L8 0 S PLURALITY (5A) NUCLEOSIDE? (10A) 2 (2A) SUBSTIT? (10A) 5 (3A) L9 0 S PLURALITY (15A) NUCLEOSIDE? (20A) 2 (2A) SUBSTIT? (20A) 5(3A 0 S PLURALITY (5A) NUCLEOSIDE? (10A) 2 (2A) (FLUORO OR ALK?) (10 L10L110 S PLURALITY (15A) NUCLEOSIDE? (20A) 2 (4A) (FLUORO OR ALK?) (2 L12 0 S PLURALITY (15A) NUCLEOSIDE? (20A) 2 (7A) (FLUORO OR ALK?) (2 L1310 S PLURALITY (15A) NUCLEOSIDE? (20A) 2 (4A) (FLUORO OR ALK?) AN L1410 DUP REM L13 (0 DUPLICATES REMOVED)

L15